

CLAIMS

WHAT IS CLAIMED IS:

1. A sealable film for the production of tear-open packages having balanced tear start and tear propagation properties in crosswise and lengthwise directions of the film, which comprises at least one layer of a polymer mixture of

- (a) 20 to 80 wt. % cycloolefin copolymer (COC) and
- (b) remainder a member selected from the group consisting of a polyolefin and an ethylene copolmer.

2. The sealable film according to claim 1 wherein said film is a single layer film

3. The sealable film according to Claim 1, wherein the cycloolefin copolymer is an ethylene/norbornene copolymer produced using a metallocene catalyst.

4. The sealable film according to Claim 1, wherein said member is a linear low-density polyethylene.

5. The sealable film according to Claim 1, wherein said member is a polypropylene.

6. The sealable film according to Claim 1, wherein said film is a coextruded laminate film having at least three layers including a core layer comprising a polyolefin or a polymer mixture with a high polyolefin content, and on each side of said core layer an adjacent layer made of a polymer mixture of cycloolefin copolymers and polyolefins.

7. The sealable film according to Claim 1, wherein said film is a coextruded laminate film having at least three layers including first and second outside layers and at least one intermediate layer wherein said first outside layer is formed from a polyolefin, said second outside layer is formed from a cycloolefin copolymer or a polymer mixture having a high cycloolefin copolymer proportion, and said at least one intermediate layer is formed from a polymer mixture of cycloolefin copolymers and polyolefins having a polyolefin content less than said first outside layer and greater than said second outside layer.

8. The sealable film according to Claim 6, wherein said film has a three-layer structure including said core layer having a core layer thickness and each adjacent layer forming an outside layer having an outside layer thickness, said core layer thickness being a multiple of the outside layer thickness.

9. The sealable film according to Claim 7, wherein said film has a three-layer structure including said intermediate layer forming a core layer having a core layer thickness and each of said first and second outside layers having an outside layer thickness, said core layer thickness being a multiple of the outside layer thickness.

10. The sealable film according to Claim 1, wherein said film has a thickness of least 15 μm .

11. The sealable film according to Claim 1, wherein with said film is produced by a flat film extrusion process or an extrusion blowing process.

12. The sealable film according to Claim 1, wherein before further processing, said film is subjected to a finishing process selected from the group consisting of lamination, imprinting, and coating.

13. A tear-open package comprising a sealable film comprising at least one layer of a polymer mixture of

(a) 20 to 80 wt. % cycloolefin copolymer (COC);
and

(b) remainder a member selected from the group consisting of a polyolefin and an ethylene copolymer;

said package demonstrating balanced tear start and tear propagation properties in the crosswise and lengthwise direction of the film.

14. The tear-open package according to Claim 13 wherein said film is a single layer film.

15. The tear-open package according to Claim 13 wherein said film is a coextruded multi-layer laminate.